

Mobile Digital Imaging System: C-Arm Shelter-Air Force Medical

What It Is:

A High-Tech Union...We integrated state-of-the-art digital imaging equipment into a two-sided expandable ISO shelter. Air Force medical personnel can use this equipment in procedures ranging from orthopedic and vascular surgery to foreign body localization.

Why It's Needed:

Up to now, digital imaging has been available only at fixed hospital sites. The C-ARM Shelter brings imaging capabilities to the field in a mobile environment.

How It Works:

The principle piece of equipment is the C-Arm X-ray. The C-Arm is relatively lightweight and compact, so it can be maneuvered easily inside the shelter. Accompanying the C-Arm is the digital workstation, with two high-resolution monitors to view and store the digital images.

Other items making up this surgical suite:

- Kodak Dry View Laser Imager...allows users to obtain X-ray film without the need for chemical processing.
- MEDRAD V Injection System...injects a dye into the patient to provide greater image contrast.
- Imaging Table...specifically designed for use with the C-Arm. This surgical table is motor driven and allows movement in three directions and rote

movement in three directions and rotation on three axes.

One C-ARM Shelter is in use at Wright Patterson Air Force Base, and two more are scheduled for completion this year.



Real-Time Communication...Images from the X-ray device show up instantly on a monitor. The shelter is wired to transmit these digital images-via the Internet or a military communication device-to remote locations, such as a hospital in the United States.

SHELTERS

Smooth Delivery and Setup... Wheel and base frame kits secure all the equipment for transport and roll the equipment into position when the shelter is ready for operation.

Point of Contact:

Collective Protection Liaison

Phone: (508) 233-4347

U.S. Army Soldier and Biological Chemical Command

Soldier Systems Center Kansas Street Natick, Massachusetts 01760 www.sbccom.army.mil

Rev 1-17-01

